



LEARNING DEVELOPMENT BUCKET

Child development can be thought of as a bucket filled with different layers of coloured sand, with each layer representing a skill or a function within the body system. At the bottom of the bucket is the Central Nervous System and for some individuals there may be holes in different skill areas, meaning the layers of sand are compromised.

The Central Nervous System is where primitive reflexes are located, and these reflexes typically integrate and 'disappear' as a child develops, arounds 2-3 years of age. For some children, these primitive reflexes stay around and can create holes or gaps in their development. When these gaps are present, it doesn't matter how much you keep adding sand to the top layers, it will continue to leak through the holes in the bottom, due to the underdeveloped and immature Central Nervous System.

Occupational Therapy can support the development of the Central Nervous System through specific movement programs to integrate and inhibit the primitive reflexes,

so that the postural reflexes can function effectively. When the postural reflexes fully develop, this provides greater control for the individual to process sensory information, maintain attention and move their body with greater balance, coordination, strength & control, leading to greater learning outcomes.

Through working at the nervous system level to address primitive reflexes, these 'holes' in the bucket can be filled over time, enabling the child's development bucket to continue 'filling up' effectively. Strengthening nerve connections throughout the body systems can further address the gaps in development through maturing the central nervous system.

Occupational Therapy interventions are effective in supporting the integration of primitive reflexes and it is important to note that these changes occur over a longer period and are not considered a 'quick fix.' Regularly practising the recommended activities is fundamental for long lasting changes within the Central Nervous System for improved learning outcomes.

